SONAR PROGRAM OPERATOR CONSOLE

INSTRUCTOR CONSOLE

PROGRAM OPERATOR CONSOLE

AN/UYK-7 COMPUTER SET

PDP-11 COMPUTER SET

400 Hz DISTRIBUTION PANEL

POWER RACK

INPUT/OUTPUT RACKS

## TRIDENT COMMAND AND CONTROL TEAM TRAINER, DEVICE 21A42A

TRAINING CATEGORY:

SEABASED STRATEGIC SYSTEM

ORIGINATING AGENCY:

CNET

SECURITY CLASSIFICATION:

Device 21A42A is CONFIDENTIAL.

PURPOSE OF DEVICE:

To provide tactical training at the general operator, sub-team, or team level for single-ship TRIDENT operations in a simulated hostile environment. Expertise is developed in coordination of ship control, sensors, avoidance and evasion, weapons, periscope usage, and tactical evaluation and decision-making.

INTENDED USE:

Shore-based simulated scenario training.

FUNCTIONAL DESCRIPTION:

The TRIDENT Command and Control Team Trainer (CCTT) enhances the attack center team's ability to perform the TRIDENT's mission. Realistic simulated scenarios provide immediate feedback on performance.

The CCTT replicates major physical structures of the TRIDENT control room including the 15L(T) periscope platform, ship control station, AN/WLR-8(V) 5, and various plotter tables.

There are two (2) modes of operation. In Stand Alone Mode, the CCTT is separate from the Sonar Team Training Laboratory (STTL). In Team Training Mode, the CCTT is coupled to the STTL.

Simulated equipment, includes the MK 48 Torpedo, MK 57 MOSS, and functions of the MK 96, and a communication system.

Acoustics simulated include ocean environmental effects, ten (10) dynamic and two (2) fixed targets, hostile passive and active sonars, and ESM emissions.

Trainer states are run, freeze, restart/play-back, and secure.

The instructor controls training through consoles. CRTs monitor the periscope, tactical displays, and the problem status. Displays may be recorded on hardcopy.

The 21A42A has two (2) AN/UYK-43 (V) processors, one (1) 11/785 processor, and distributed microprocessors.

An image generator and CRT simulate the periscope's dynamic scene of sea/sky and up to twelve (12) targets. All scene elements contribute to the sense of motion as the periscope rotates.

PHYSICAL INFORMATION:

Device is four (4) land-based rooms:

| | |
|---|---|
| Computer Room: | 31' x 40' |
| CCTT Laboratory: | 30' x 33' |
| CCTT Control Room: | 25' x 27' |
| CCTT Briefing Room: | 20' x 32' |

POWER REQUIREMENTS

| Input Characteristics | Max Peak Power (KVA) |
|---|---|
| 120/208V, 60 Hz, 3-Ph, 4-wire | 60.9 |
| 115V, 60 Hz, 3-Ph, 3-wire, DELTA | 2.6 |
| 440V, 60 Hz, 3-Ph, 3-wire, DELTA | 10.8 |
| 115V, 400 Hz, 3-Ph, 3-wire, DELTA | 12.8 |
| **TOTAL** | **87.1** |

PUBLICATIONS FURNISHED:

Complete maintenance, logistics, and development documentation is provided with Device 21A42A.

EQUIPMENT REQUIRED (NOT SUPPLIED):

A variety of Government and contractor prepared publications are applicable to Device 21A42A.

PERSONNEL:

**Instructor/Operator:** Two (2) Gun Fire Control Technicians

**Trainees:** Class of up to Twenty (20)

**Maintenance:** Five (5) Senior Petty Officer control, data systems, and electronics technicians with experience and training in relevent specialties.

RELATED TRAINING EQUIPMENT:

Device 21A42A operates with the Sonar Team Training Laboratory (STTL) or separately.

CONTRACT IDENTIFICATION:

Manufactured by Link Simulation Systems Corp., Silver Spring, MD under NAVTRASYSCEN Contract No. N61339-86-C-0028.

LOCAL STOCK NUMBER:

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